

Sören Kviberg

President of the Environmental Committee
Region Västra Götaland,
Lead Partner Build with CaRe



THE CONSORTIUM



Hanna Katarina Nyroos/ Hanna Blomdahl

Project Managers Build with CaRe



The Interreg IVB
North Sea Region
Programme



Build with CaRe is a project partly funded by the European Regional Development Fund.
Investing in the future by working together for a sustainable and competitive region.



...to mobilize all forces in order to make energy-efficient building design the mainstream choice of construction

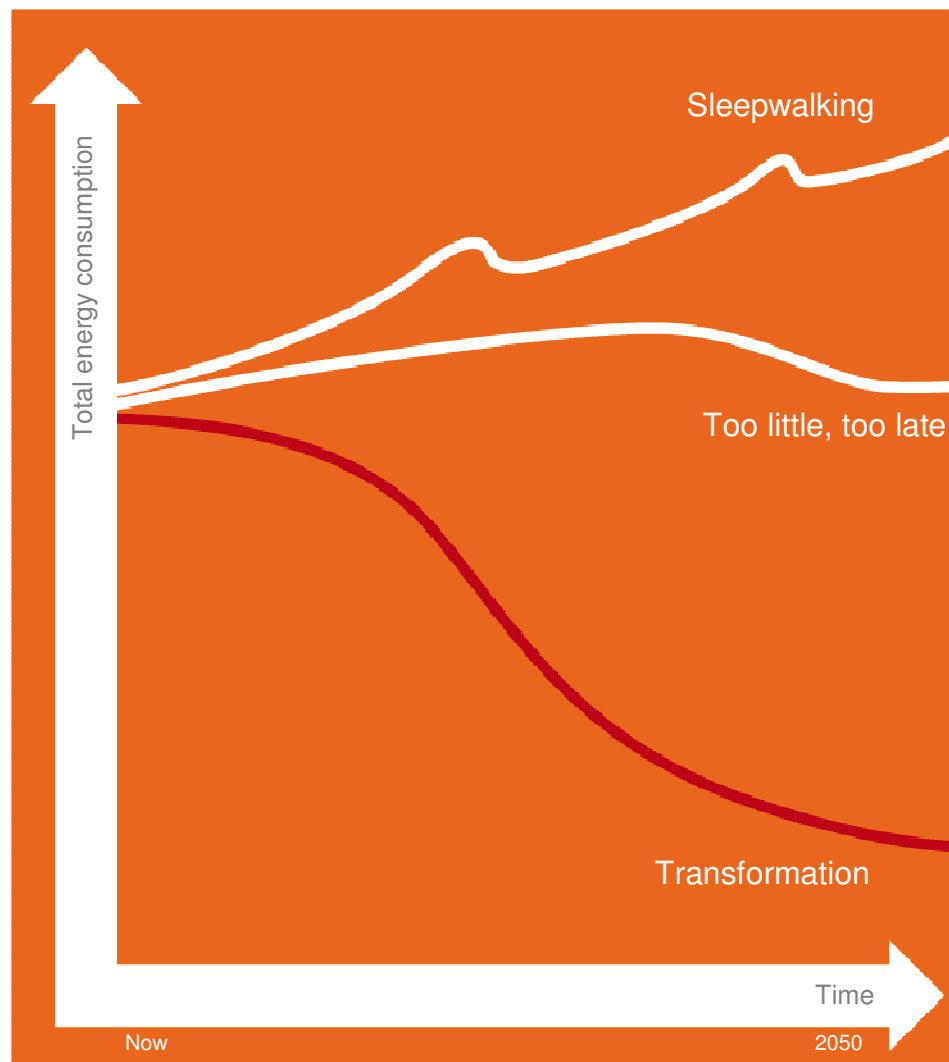
because

...success in energy efficient building is key to achieving the EU climate goals

and

...will create jobs, drive innovation and stimulate smart and sustainable growth

TIME TO WAKE UP



Total
transformation
needed!

Relation to IPCC scenarios 6 degrees	Relation to building energy and CO2
4 degrees	
< 2 degrees	60-80 %

"REFURBISHING EUROPE

– AN EU STRATEGY FOR ENERGY EFFICIENCY AND CLIMATE ACTION
LED BY BUILDING REFURBISHMENT"

Target:

40% cut in energy demand by 2050

- Dramatically enhancing the energy efficiency of buildings is the critical step to reducing demand.
- Deep low-energy refurbishments provide the greatest opportunity for energy saving and greenhouse gas reduction.
- Barriers inhibiting action need to be addressed by the EU and by governments

"By making its building stock energy efficient, the EU can demonstrate that economic growth is consistent with reduced energy demand and lead the transition to a sustainable world." Dr Bruce Tofield

Marketing and Publicity

Education and Training

Planning and Policy

Evidence Base

RESULTS



The Interreg IVB
North Sea Region
Programme



Build with CaRe is a project partly funded by the European Regional Development Fund.
Investing in the future by working together for a sustainable and competitive region.

Visitors Centre Puyenbroeck, East Flanders, Belgium Passive building

- Heat energy demand:
11 kWh/(m²a)
- Air leakage rate:
0.14 times house volume / hour
(passivhaus standard ≤ 0.6 / hour)
- Box-in-box construction



Marischal College, Aberdeen

- BREEAM rating: Excellent
- 4 900 tonnes of construction materials recycled
- Sustainable energy
- smart lighting system
- convenient bike entrance



Prittlewell Chapel, Southend-on-Sea

- Building management system
- Solar cells
- Air source heat pump

Sustainability award!



The Interreg IVB
North Sea Region
Programme



Build with CaRe is a project partly funded by the European Regional Development Fund.
Investing in the future by working together for a sustainable and competitive region.

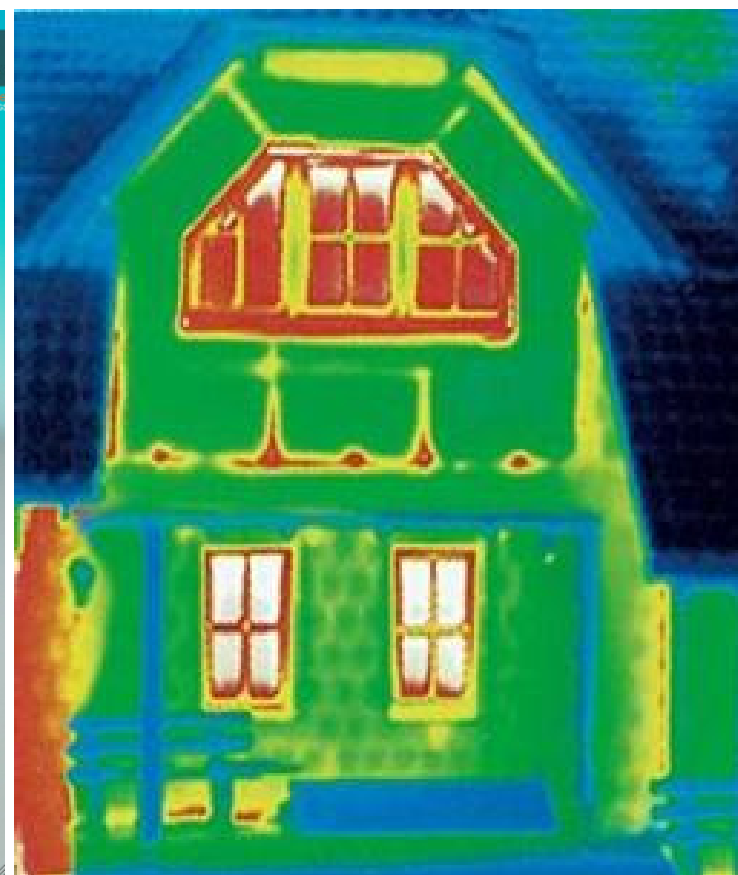


DEMONSTRATION AND LEARNING



eBuild

THE INTERACTIVE LEARNING TOOL



CAMPAIGNS AND PUBLIC PROMOTION

SWEDEN:

VGR

Open Day of the Passive House

Swedish Energy and Building Expo

Region Västra Götaland Energy Congress

Swedish Energy Market

GERMANY:

Hamburg

Open Day of the Passive House

Northern German Passive House Conference

Open Construction Sites

Days of the Energy Saving Records

IBA campaign Prima Klima Anlage

Exhibition IBA at work

GERMANY:

Open Day of the Energy Hill

Open day at the IBA Dock

Exhibition Willhelmsburg Mitte

IBA HafenCity Laboratory "Architecture and Climate Change"

Bremen:

Open House Days

Bremer Albautage

Oldenburg:

Exhibition at Nordhaus-Messe

Smart Home Oldenburg

BwC congress Energy efficient house - retrofitting of buildings

Campaign "Klimaplus"

Open Day of the Passive House

CAMPAIGNS AND PUBLIC PROMOTION

UK:

Aberdeen:

BwC Conference at Robert Gordon University

West Suffolk College:

Low Carbon Passive House Centre

How to design and construct low energy buildings conference

The Retrofit Challenge Conference

Dundee:

Architectural Design Exhibition

Southend:

Funding a green future conference

THE NETHERLANDS:

Nord-Beveland:

Open House "Styropor House"

Passive House Workshop Wissenkerke

Grooningen:

Bouwbeurs in Assen "Bouwen aan energiebesparing"

BELGIUM:

Flanders:

Passive House Exhibition in Puyenbroeck

INTERNATIONAL:

Annual Conferences

European Sustainable Energy Week

North Sea Commission annual events



EXTENSIVE PROMOTION

20 000 = visits to website

23 000 = participants at BwC events

CARE magazine = Issued in 4 000 copies. Nominated for the Swedish Publishing Price.



EUROPEAN LEVEL

MEP-AMBASSADORS

Jean Lambert
Andrew Duff
Olle Ludvigsson

CONSULTATIONS

LOBBYING

EU Sustainable Energy Week

REGIONAL INITIATIVES

Gothenburg: First passive houses (Lindås) and largest passive house (Hamnhuset)

Hamburg: 12 certified passive houses with 156 apartments plus commercial units

Schleswig-Holstein: 54 passive apartments plus 5 non-residential units

Norwich: Passive houses in Diss and Wimbish plus UEA low carbon buildings

Some results/experiences/examples:

- Houses have aged well, air tightness and low energy consumption remains
- Majority are satisfied with their houses including the indoor climate
- Overheating in summer more of an issue than coldness during winter
- Temperature vary between rooms
- User behaviour has substantial impact on total energy use (household electricity, hot water)
- Individual metering and charging are efficient tools to influence user behaviour
- Room for improvement of technical solutions and user instructions
- Ventilation needs to be well thought through
- Close cooperation within project team is significant for success

STUDY VISITS
EXPERT EXCHANGE
WEBINARS

*Confidence
Knowledge
Experience*

"Cross-border influence of Build with CaRe has had very tangible outcomes and shared knowledge has resulted in bold decisions being taken"



Thank you for four fantastic years!

Project Managers

Hanna Blomdahl

Lave Thorell

Hanna Katarina Nyroos



The Interreg IVB
North Sea Region
Programme



Build with CaRe is a project partly funded by the European Regional Development Fund.
Investing in the future by working together for a sustainable and competitive region.

